

'A means for oxidizing...' and 'a means for continuously transporting' have been amended to recite 'a first anode...'. Support is found in the specification on page 11, lines 12-17.

'A means for reducing...' has been amended to 'a first cathode...'. Support is found on page 11, line 4.

'A means for isolating the reduced uranium' has been deleted.

'A first electrolytic salt bath' has been added. Support is on page 11, line 6.

'A second anode...' has been added. Support is on page 14, line 4.

'A second cathode...' has been added. Support is found in the specification on page 14, line 7.

'A means for receiving...' has been amended to recite 'a scrapper..' and 'a receptacle...'. Support is found on page 12, line 31.

Claim 11 was rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Claim 11 has been canceled.

Claim 13 was rejected under 35 U.S.C. 112, second paragraph, for insufficient antecedent basis for 'the chain belt'. Claim 13 depends from claim 9 and has been amended to recite the segmented belt of claim 9.

Support for new claim 20 is found in the specification on page 11, line 23.
Support for new claim 21 is found on page 15, line 15. Support for new claim 22 is found on page 11, line 26. Support for new claim 23 is found on page 14, line 31.
Support for new claim 24 is found on page 20, line 15. Support for new claim 25 is

found on page 20, line 14. Support for new claim 26 is found on page 12, line 12.

REJECTION UNDER 35 U.S.C. 102

Claims 9 and 12 were rejected under 35 U.S.C. 102(b) as being anticipated by Leeker et.al.(US 5,106,467). Leeker teaches the use of a sodium hydroxide solution as an oxidizing agent. The present invention, in amended claim 9, teaches an anode comprising the first containment vessel, a segmented belt, segment connectors, shredded nuclear fuel, and a drive sprocket in electrical communication in a salt bath as an oxidizing agent. Leeker teaches the removal of zinc from scrap steel while amended claim 9 teaches shredded nuclear fuel as an element of the anode. Amended claim 12 teaches the oxidation of uranium not taught by Leeker. Therefore Leeker does not teach each and every element of the present invention.

Claims 9 and 12 were rejected under 35 U.S.C. 102(b) as being anticipated by Fraser et. al. , (US 4,204,922). Fraser teaches an anode compartment with a mechanical mixing device separated from the cathode by an ion permeable membrane. The present invention, in amended claim 9, teaches an anode the first containment vessel, a segmented belt, segment connectors, shredded nuclear fuel, and a drive sprocket in electrical communication. Fraser teaches a process where the metals are copper, zinc, lead, nickle, silver, cadmium, molybdenum and tin, rather than the shredded nuclear fuel of the present invention. Therefore Fraser does not anticipate the present invention as he does not teach every element of the present invention.

REJECTION UNDER U.S.C. 103


Claims 14, 17, 18 and 19 were rejected under 35 U.S.C. 103(a) as being

unpatentable over Leeker or Fraser. These claims all depend from claim 9 which is not anticipated nor obvious by Leeker or Fraser. One skilled in the art of processing nuclear fuel would not use a device to recover zinc from scrap steel or a device to recover metal from sulfur compounds. Neither Leeker or Fraser provide for a cathode which is remote from the electrolytic solution so that the scrapper could be attached remote from the solution.

Claims 15 and 16 were rejected as being unpatentable over Fraser. Both claims depend from claim 9 which is neither anticipated nor made obvious by Fraser. Fraser did not make his anode and cathode rotatable.

Claims 9, 12 and 14-19 were rejected as unpatentable over Tanaka. Claim 9 has been amended to recite the segmented belt as part of the anode. The belt serves to transport the shredded nuclear fuel as it is being processed. Tanaka uses a basket anode to hold the spent fuel. It would not be obvious to one skilled in the art to add a segmented belt as part of the anode. The present invention is designed to overcome the batch limitations of Tanaka.

Respectfully submitted,


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